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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/505,166 | 06/27/2005 | Michel Droux | 257397US0PCT | 6678 |
| 22889 | 7590 | 11/12/2008 | | |
| OWENS CORNING 2790 COLUMBUS ROAD GRANVILLE, OH 43023 | | | EXAMINER COLE, ELIZABETH M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1794 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/505,166 | Applicant(s) DROUX, MICHEL | |
| | Examiner Elizabeth M. Cole | Art Unit 1794 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/28/08 has been entered.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-7, 10-11, 15-16, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaa et al, U.S. Patent No. 4,810,576 in view of Smith, U.S. Patent No. 5,853,133. Gaa et al discloses a method of making a chopped strand mat comprising the step of dispersing, in a white water, chopped strands that are dried after sizing with a sizing liquid comprising an organosilane and a film former, (see col. 9, lines 17-29, col 12, lines 12-17, col. 7, lines 51-52), forming a wet by passing the dispersion over a forming wire, col. 15, lines 16-26, applying a binder and then heat-treating. See col. 13, lines 1-145, col. 4, lines 60-64. With regard to claims 2 and 3, the dried strands include less than 0.01 to 1.5 wt percent of the aqueous treating composition. See claim 19. With regard to claim 5, the fibers can have a length of anywhere from about 1.59 mm to about 76.2 mm. See col. 11, lines 63-66. With regard to claims 6 and 7, the strands are dispersed in the white water in an amount of 0.001-5 weight percent. See

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col. 12, lines 17-20. With regard to claims 10-11, the mat may comprise binder in an amount of 3-45 percent by weight. See col. 13, lines 35-38. With regard to claim 15-16, the strands comprise glass. See entire document. With regard to claim 18, since the claimed range is 10-50 degrees C and since the Gaa document does not disclose heating or cooling the white water dispersion either before or after the strands are added, it is reasonable to say that the dispersion would have a temperature of about room temperature which would be within the claimed range. With regard to the claims as amended, Gaa teaches incorporating a lubricant surfactant at col. 10, lines 41-54. With regard to the limitation that the size consists essentially of the claimed components, "For the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising." See, e.g., PPG, 156 F.3d at 1355, 48 USPQ2d at 1355 ("PPG could have defined the scope of the phrase consisting essentially of" for purposes of its patent by making clear in its specification what it regarded as constituting a material change in the basic and novel characteristics of the invention.")). MPEP 2111.03 Also, If an applicant contends that additional steps or materials in the prior art are excluded by the recitation of "consisting essentially of," applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. In re De Lajarte, 337 F.2d 870, 143 USPQ 256 (CCPA 1964). Therefore, the burden is on Applicant to establish what the basic and novel characteristics of the invention are and how additional

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components constitutes a material change in the basic and novel characteristics of the invention. With regard to the limitation that the chopped strand mat is heat treated, Gaa teaches at col.16, heating the thus formed mat in an oven which corresponds to the claimed heat treating step. Gaa differs from the claimed invention because Gaa does not clearly teach applying the size to glass strands wherein a strand is an assembly of glass fibers called a strand, although at column 5, Gaa does state that the terms strand and fibers can be used interchangeably in the reference. Smith teaches that in forming sized glass fiber strands the glass fibers can be formed into a strand and then sized. See figure 1 wherein the extruded fibers are formed into a strand 14 at gathering member 16 and then the size is applied at size applicator 18, (see column 4, lines 7-24). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the size to the formed strands as taught by Smith rather than prior to strand formation, in view of the fact that Smith teaches that this method of applying the size was an alternative known method of .

1. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gaa in view of Smith as applied to claims 1-3, 5-7, 10-11, 15-16, 18 above, and further in view of Vinamul 8837 product specification. Gaa discloses employing a film forming agent which may comprise a PVA polymer, but does not disclose the claimed molecular weight and solubility. Vinamul 8100 teaches that it is a film forming PVA polymer which is specially designed to be used in chopped strand mats and which has the claimed viscosity and solubility. Since Vinamul is known in the art to be useful in forming

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chopped strand mats, it would have been obvious to have employed it as the particular film former in Gaa based on its art recognized suitability for this purpose.

2. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaa in view of Smith as applied to claims 1-3, 5-7, 10-11, 15-16, 18 above, and further in view of Dolin, U.S. Patent No. 4,526,914. Gaa differs from the claimed invention because it does not disclose the claimed viscosity, although it does disclose the use of a thickener. See col. 15, lines 16-21. Dolin teaches at col. 1, lines 45-48 that conventionally it is desired that the viscosity of white water is between 2-12 cps which corresponds to the claimed range. Therefore, it would have been obvious to one of ordinary skill in the art to have added the thickener disclosed by Gaa in amounts which produced the viscosity taught by Dolin, since these values were taught in the art as desirable and conventional in forming white water dispersants.

3. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gaa in view of Smith as applied to claims 1-3, 5-7, 10-11, 15-16, 18 above, and further in view of Lalwani et al, U.S. Patent No. 4,917,764. Gaa differs from the claimed invention because it does not disclose the claimed temperature of the heat treating step. Lalwani et al teaches that such heat treating steps are conventionally performed at temperatures such as anywhere from 100-400 degrees C depending on the materials involved. See col. 4, lines 20-29. Therefore, it would have been obvious to have employed temperatures as taught by Lalwani in the invention of Gaa, since such temperatures were known to be conventionally used in the art.

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4. Claims 13 –14, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaa in view of Smith as applied to claims 1-3, 5-7, 10-11, 15-16, 18 above, and further in view of Hannes et al, U.S. Patent No. 4,112,174. Gaa differs from the claimed invention because it does not disclose claimed basis weight of the mat and does not disclose claimed number of filaments. Hannes et al disclose basis weights of 100-120 gsm as typical basis weights for such glass mats. See col. 6, lines 58-60. Hannes et al teaches that strands having 1-300 filaments are typical values for such materials. See col. 4, lines 38-40. Therefore, it would have been obvious to have employed the particular types and number of filaments and to have formed the mats to have the claimed basis weights, in view of the teaching of Hannes that such materials and weights were conventionally known and used.

5. Applicant's arguments filed 8/28/08 have been fully considered but they are not persuasive. Applicant argues that Gaa does not teach applying the size to strands but instead teaches applying the size to fibers. However, initially, it is noted that Gaa equates fibers and strands at column 5 and says that the terms can be used interchangeably. Further, the newly applied reference to Smith clearly teaches that it was known in the art to apply the size to the strand after the strand has been formed.

6. Applicant argues that Gaa teaches dispersing chopped fibers in the white water rather than chopped strands. However, at column 5, Gaa states that the terms fibers and strands are being used interchangeably in the reference. Further, the abstract of Gaa, as well as column 2, lines 3-19, clearly states that wet chopped strands are used to form the mat.

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7. With regard to the rejection over Gaa in view of Vinamul, Applicant repeats the arguments against the Gaa reference. These arguments are addressed above.

8. Applicant argues that Gaa teaches away from applying the size to strands. However, Gaa uses the terms fibers and strands interchangeably. Further, a teaching of one method is not a teaching away from another method. Gaa does not teach or imply that the size should not be applied to a strand and must only be applied to fibers. Finally, Smith teaches applying a size to already formed strands as set forth above.

9. With regard to the combination of Gaa and Dolin, Gaa and Lalawani, and Gaa and Hannes, Applicant argues that the combination fails to teach the claimed invention for the reasons set forth with regard to Gaa above. These arguments are addressed above.

10. Applicant's amendment has overcome the 112 2nd paragraph rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

The examiner's supervisor Rena Dye may be reached at (571) 272-3186.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

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/Elizabeth M. Cole/
Primary Examiner, Art Unit 1794

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